1. A CMOS circuit fabricated using a process that can create thick oxide transistors and thin oxide transistors, comprising:

a differential logic circuit fabricated of thin oxide transistors, and having a plurality of inputs; and

a current source, supplying bias current to the differential logic circuit, the current source fabricated using at least one thick oxide transistor.

2. The apparatus according to claim 1, wherein the current source has a control input that can determine how much current is available to source to the differential logic circuit.

3. The apparatus according to claim 2, further comprising an adaptive bias control that provides a control signal at the control input of the current source to increase the bias current available to the differential logic circuit.

4. The apparatus according to claim 3, further comprising means for selectively adjusting an amount of bias current available to the logic circuit.

5. The apparatus according to claim 2, further comprising an adaptive bias control, coupled to at least one of the logic inputs, and is responsive to a voltage transition on the logic input to provide a control signal at the control input of the current source to increase the bias current available to the differential logic circuit.

6. The apparatus according to claim 5, further comprising a bias load circuit loading the differential logic circuit.

7. The apparatus according to claim 6, wherein the bias load circuit has a load current control input; and

wherein the adaptive bias control is responsive to the voltage transition on the logic input to provide a load current control signal at the load current control input of the bias load circuit to increase the bias current through the load.

8. The apparatus according to claim 6, wherein the bias load circuit comprises a resistive load.

9. The apparatus according to claim 1, wherein the differential logic circuit has a differential output voltage swing of less than 300mV.

10. The apparatus according to claim 1, wherein the differential logic circuit has a differential output voltage swing of between 100mV and 300mV.

11. The apparatus according to claim 1, wherein the differential logic circuit comprises a pair of matched thin oxide transistors configured as a differential inverter.

12. A CMOS circuit fabricated using a process that can create thick oxide transistors and thin oxide transistors, comprising:

a differential logic circuit fabricated of thin oxide transistors, and having a plurality of inputs;

a current source, supplying bias current to the differential logic circuit, the current source fabricated using at least one thick oxide transistor, the current source having a control input that can determine how much current is available to source to the differential logic circuit; and

an adaptive bias control that provides a control signal at the control input of the current source to selectively control the bias current available to the differential logic circuit.

13. The apparatus according to claim 12, wherein the adaptive bias control is coupled to at least one of the logic inputs, and is responsive to a voltage transition on the logic input provides a control signal at the control input of the current source to control the bias current available to the differential logic circuit.

14. The apparatus according to claim 12, further comprising a bias load circuit loading the differential logic circuit.

15. The apparatus according to claim 14, wherein the bias load circuit has a load current control input; and

wherein the adaptive bias control is responsive to the voltage transition on the logic input to provide a load current control signal at the load current control input of the bias load circuit to control the bias current through the load.

16. The apparatus according to claim 14, wherein the bias load circuit comprises a resistive load.

17. The apparatus according to claim 12, wherein the differential logic circuit has a differential output voltage swing of less than 300mV.

18. The apparatus according to claim 12, wherein the differential logic circuit has a differential output voltage swing of between 100mV and 300mV.

19. A CMOS circuit fabricated using a process that can create thick oxide transistors and thin oxide transistors, comprising:

a differential logic circuit fabricated of thin oxide transistors, and having a plurality of inputs, the differential logic circuit comprising a pair of matched thin oxide transistors configured as a differential inverter;

a current source, supplying bias current to the differential logic circuit, the current source comprising a thick oxide transistor receiving a supply voltage at a drain thereof and coupling a reduced supply voltage to the differential logic circuit through a source thereof, the current source having a control input at a gate thereof that can determine how much current is available to source to the differential logic circuit; and

an adaptive bias control that provides a control signal at the control input of the current source to selectively control the bias current available to the differential logic circuit.

20. The apparatus according to claim 19, wherein the adaptive bias control is coupled to at least one of the logic inputs, and is responsive to a voltage transition on the logic inputs to provide a control signal at the control input of the current source to control the bias current available to the differential logic circuit.

21. The apparatus according to claim 19, further comprising a bias load circuit loading the differential logic circuit.

22. The apparatus according to claim 21, wherein the bias load circuit has a load current control input; and

wherein the adaptive bias control is responsive to the voltage transition on the logic input to provide a load current control signal at the load current control input of the bias load circuit to control the bias current through the load.

23. The apparatus according to claim 19, wherein the bias load circuit comprises a resistive load.

24. The apparatus according to claim 19, wherein the differential logic circuit has a differential output voltage swing of less than 300mV.

25. The apparatus according to claim 19, wherein the differential logic circuit has a differential output voltage swing of between 100mV and 300mV.